

## **REMARKS**

Claim 27 has been cancelled; thus, claims 1-26 are all the claims pending in the application. Claims 1-27 stand rejected upon informalities. Applicants respectfully traverse these rejections based on the following discussion.

### **I. The Objections to the Specification**

In regards to paragraph 0003 of Applicants' disclosure, the Office Action asserts that there is "believed to be an error because mirroring does not equal RAID-0" (Office Action, p. 2, para. 3). Applicants have amended paragraph 0005 to replace "RAID-0" with "RAID-1".

In regards to paragraph 0026 of Applicants' disclosure, which discloses "some threshold value (e.g.,  $> 0.25$ ), the Office Action asserts that "[t]here is no unit associated with this number and should be clarified" (Office Action, p. 2, para. 4). Applicants submit that the numeral "0.25" represents a fraction (i.e., the ratio of two numbers with the same unit; e.g., number of blocks); thus, the numeral does not specify a specific unit.

Furthermore, the Office Action states that "a substitute specification with properly numbered pages is required" (Office Action, p. 3, para. 1). Applicants have attached a substitute specification hereto. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objections to the specification.

## **II. Request For Information Under 37 C.F.R. § 1.105**

In response to the Examiner's request to provide copies of the references cited in Applicants' disclosure, please reference Applicants' Information Disclosure Statement, attached hereto.

## **III. The 35 U.S.C. § 112, First Paragraph Rejections**

### **A. Independent Claim 1**

The Office Action asserts that the term "combining" is ambiguous (Office Action, p. 3, para. 5). More specifically, the Office Action argues that "[i]t is ambiguous if the term 'combining' is meant to imply comparing addresses or combining addresses" (Office Action, p. 3, para. 5). Applicants have amended claim 1 to define "combining an address ... with a set of retrievable addresses". As such, Applicants submit that it is not ambiguous whether the claim language defines "*comparing* addresses or *combining* addresses".

In regards to the claim language "periodically computing a function of said data", the Office Action asserts that "[t]he data has not been stored yet ... so it is unclear as to how the function is being periodically stored" (Office Action, p. 4, para. 1). Moreover, the Office Action argues that it is not clear what is being stored (Office Action, p. 4, para. 1). To more clearly define the claimed method, Applicants have amended claim 1 to define "periodically computing a function of said data to be stored in said disk array to produce a computation; [and] storing said computation". Thus, Applicants submit that it is no longer unclear "how the function is being periodically stored" or "what is being stored".

In regards to the claim language “using said set of retrievable addresses to recompute ... said function”, the Office Action argues that “[i]t is not clear whether it is the recomputing being done on the ECC function or if the function is applied to the data itself” (Office Action, p. 4, para. 1). To more clearly define the claimed method, Applicants have amended claim 1 to define “on a disk failure in said disk array, updating said computation using said set of retrievable addresses to recompute only altered portions of said computation”. As such, Applicants submit that it is no longer unclear “whether it is the recomputing being done on the ECC function or if the function is applied to the data itself”.

In regards to the claim language “deleting said set of retrievable addresses”, the Office Action argues that “[t]he specification does not cover the details of deleting these addresses and why it is being deleted” (Office Action, p. 4, para. 1). Applicants submit that one skilled in the art would know that data is obsolete and should no longer be retained. Thus, one skilled in the art would know how to “delet[e] said set of retrievable addresses” as defined by independent claim 1.

#### B. Independent Claims 11 and 19

In regards to the claim language “determining which of said data blocks contain redundant data that has been altered ...”, the Office Action asserts that “[i]t is unclear as to what is meant by ‘altered since an immediate previous time said redundant data was stored’” (Office Action, p. 4, para. 2). To more clearly define the claimed method, Applicants have amended claims 11 and 19 to define “determining which of said data blocks contain altered redundant

data, wherein said altered redundant data comprises at least a portion of said redundant data that has been altered subsequent to an immediate previous time said redundant data was stored”.

In regards to the claim language “recomputing altered portions of said redundant data ...”, the Office Action asserts that “[t]he specification fails to introduce this concept and explain in detail” (Office Action, p. 4, para. 2). To more clearly define the claimed method, Applicants have amended claim 11 to define “recomputing said altered portions of said redundant data to produce recomputed altered portions; and storing said recomputed altered portions in said data blocks”.

#### **IV. The 35 U.S.C. § 112, First Paragraph Rejections**

In regards to the claim language of Claim 1 “periodically computing a function of said data stored in said disk array”, the Office Action asserts that “[i]t is ambiguous as to whether the data or the function that operates on the data is being manipulated” (Office Action, p. 6, para. 3). To more clearly define the claimed method, Applicants have amended claim 1 to define “periodically computing a function of said data to be stored in said disk array to produce a computation; [and] storing said computation”.

In regards to the claim language “monitoring said disks” and “monitoring the disks” of claims 11 and 19, respectively, the Office Action argues that there is reference to “said disks” or “the disks” prior to their introduction (Office Action, p. 7, para. 5; p. 8, para. 5). Applicants have amended claims 11 and 19 to define “monitoring disks”.

## **V. Formal Matters and Conclusion**

With respect to the rejections to the claims, the claims have been amended, above, to overcome these rejections. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 1-26, all the claims presently pending in the application, are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

6/29/07

/Duane N. Moore/

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